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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,448	07/11/2003	Haim Feldman	Q76231	3481
23373	7590	07/26/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			MONBLEAU, DAVIENNE N	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,448

Applicant(s)

FELDMAN ET AL.

Examiner

Davienne Monbleau

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper.No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2878

DETAILED ACTION

Response to Amendment

The amendment filed on 7/5/05 has been entered. Claims 11, 15, and 16 have been amended. Claims 11-17 are pending.

Claim Objections

Regarding Claim 15, Examiner requests that the Applicant double check to make sure that the “first” and “second” common axes are labeled correctly because there is some inconsistency in the response section on page 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunose (U.S. 6,043,932) in view of Kiik et al. (EP 0 866 502 A2).

Art Unit: 2878

Regarding Claim 11, *Kusunose* teaches in Figures 1 and 2(A) a linear light detector apparatus for detecting light from an object that is generated by a plurality of concurrently scanning spot beams that scan the object along a first common axis (Figure 2(A) second direction) comprising a plurality of adjacent light detector sections (11a – 11c) disposed linearly along a second common axis, each detector section positioned to detect said light concurrently with other detector sections that is generated by a respective scanning beam (lines 20-31). *Kusunose* further teaches in column 9 lines 7-10 a CCD driver (43) to read out electric charges stored in respective light receiving elements line by line, which says that each detector section (11a – 11c) has a plurality of detector elements (i.e. pixels) disposed linearly in a second common axis. *Kusunose* does not teach a multi-stage storage device. *Kiik* teaches in Figure 1 at least one multistage storage device (110) operative to receive in parallel an input from a plurality of light detectors and to serially readout (112) information stored in said multiple stages. Since each register (110) comprises a plurality of vertical register elements (see Figure 3) and each vertical register element receives a pixel signal, each detector section comprises a plurality of light detectors. It would have been obvious to one of ordinary skill in the art to use a multi-stage storage device in *Kusunose*, as taught by *Kiik*, to eliminate first pixel droop in CCD sensors while maintaining uniform pixel pitch.

Regarding Claim 12, *Kiik* teaches in Figure 2 that each light detector section comprises an input (132) for section transfer signals and an output (134) for serial readout of said section.

Regarding Claim 13, *Kiik* teaches in Figures 1 and 3 that each said light detector section comprises a temporary shift register having plural stages (see Figure 3), said shift register being

Art Unit: 2878

operative to receive in each stage in parallel the content of a corresponding detector and to be read out serially (112). (Each stage, AA-DA, acts as a temporary shift register).

Regarding Claim 14, *Kiik* teaches in Figure 2 a source of section transfer signals (132) to provide section transfer signals to read out a plurality of said stages in series, and a data out line including a buffer (108) to carry said serial read out signals.

Regarding Claim 15, the method of the device is not germane to the issue of patentability of the device itself, since the device itself obviously uses the method. Therefore the rejection used on the device applies also to the method of the device. See discussion on Claim 11 above.

Regarding Claim 16, *Kusunose* teaches in Figure 3 in column 9 lines 1-15 synchronizing the timing of the scanning of said beams and said readout of said stored signals.

Regarding Claim 17, *Kusunose* does not teach that said capturing and storing step is conducted concurrently in only a portion of said first plurality of sections. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use concurrent capturing and storing only in a portion of the first plurality of sections in order to inspect a particular portion of the scanned object independently. Additionally, when scanning a small object, it may only be necessary to use a portion of a section to inspect said object.

Response to Arguments

Applicant's arguments filed 7/5/05 have been fully considered but they are not persuasive.

In particular, the Applicant argues on page 5 of the response that the cited prior art of record (*Kusunose*) does not teach that the plural scanning beams scan along a common axis. *Kusunose*, however, teaches that the plurality of beams scan in the same direction (see Figure

Art Unit: 2878

2(A) ... second direction) which can be said to be along a common axis. Thus, *Kusunose* teaches the claimed limitation.

The Applicant further argues on page 8 of the response that the cited prior art of record (*Kusunose* and *Kiik*) do not teach that the plurality of adjacent light detectors are disposed linearly along a second common axis. The claims, however, make no distinction between the first and second axes and do not teach their respective relationship. Thus, *Kusunose* in view of *Kiik* teaches the claimed limitation.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2878

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davienne Monbleau
DNM


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